IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Cancelled)

2.   (Currently Amended) A method for transferring IP data comprising payload and header fields, the method comprising:
        allocating at least two logical connections for the transfer of header fields compressed on the basis of different compression statesA method according to claim 1, wherein a logical connection is allocated to the-header fields of the-an initiation/refresh compression state and a logical connection for to the-header fields of a first order compression state and the-header fields of a second order compression state; and
        transferring a the-compressed header fields-are transferred on one of said two-logical connections, depending on the-a compression state of the header field.

3.   (Currently Amended) A method according to claim [[1]]2, in which a radio resources control (RRC) protocol is used for the management of radio resources, wherein the parameters of said logical connections are signaled between the-RRC protocol entities;
        said logical connections are mapped to the-a packet data convergence protocol layer entity;
        said logical connections are reconfigured when necessary; and
        said logical connections are released in response to the removal of said convergence protocol layer entity.

4.   (Currently Amended) A method according to claim [[1]]2 in which the compression is controlled on the-a packet data convergence protocol layer of a mobile communications system, wherein the header fields and payload of an IP packet to be transferred are separated on said convergence protocol layer;
        the header fields are compressed using the-a selected compression algorithm and compression context;
        the payload is transferred on a logical connection allocated to it and the header fields on logical connections allocated to them according to the context;

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the header fields received on the logical connections are decompressed on ~~the~~ a

convergence protocol layer of ~~the~~ a recipient according to ~~the~~ negotiated compression

algorithm and compression context, and

the header fields and the payload are combined on the recipient's convergence

protocol layer.

5.   (Original)   A method according to claim [[1]]2, wherein at least separate

radio bearer parameters are reserved for said logical connections to be allocated to the header

fields compressed on the basis of different contexts.

6.   (Currently Amended) A method according to claim [[1]]2, further comprising:

synchronizing ~~the~~ channels to be used for said logical connections.

7.   (Currently Amended) A telecommunications system comprising compression

means for compressing and decompressing ~~the~~ header fields of IP packets to be transferred,

wherein

the telecommunications system is configured to allocate at least two logical

connections for the transmission of header fields compressed on the basis of different

contexts, the telecommunications system being configured to allocate a logical connection to

header fields of an initiation/refresh compression state and a logical connection for header

fields of a first order compression state and header fields of a second order compression state;

and

the telecommunications system is configured to transfer ~~the~~ a compressed header

fields ~~compressed on the basis of different contexts~~ on one of said separate logical

connections, depending on a compression state of the header field.

8.   (Currently Amended) A telecommunications system according to claim 7,

wherein the telecommunications system is configured to allocate at least two logical

connections for the transmission of the header fields compressed on the basis of different

contexts and at least one logical connection for ~~the~~ payload.

9.   (Original)   A telecommunications system according to claim 7 or 8,

wherein the telecommunications system is configured to reserve at least separate radio bearer

parameters for said logical connections to be allocated to the header fields compressed on the basis of different contexts.

10.   (Currently Amended) A mobile station ~~comprising a data link layer~~ configured to transfer data to and from a packet radio network, wherein

the mobile station is configured to allocate, in response to an instruction received from the packet radio network, at least two logical <u>data link layer</u> connections ~~on the data link layer~~ for the transmission of header fields compressed on the basis of different contexts<u>, the mobile station being configured to allocate a logical connection to header fields of an initiation/refresh compression state and a logical connection for header fields of a first order compression state and header fields of a second order compression state</u>; and

the <u>~~data link layer~~mobile station</u> is configured to transfer <u>a compressed</u> ~~the~~header fields ~~compressed on the basis of different contexts~~ on <u>one of</u> said separate logical connections<u>, depending on a compression state of the header field</u>.

11.   (Currently Amended) A mobile station according to claim 10, comprising a radio resources control protocol layer <u>entity for</u> ~~which controls~~<u>controlling</u> a packet data convergence protocol layer <u>entity in the mobile station</u> ~~of the data link layer~~, wherein the radio resources control protocol layer <u>entity</u> is configured, in response to an instruction transferred by ~~the~~<u>a</u> radio resources control protocol layer of the packet radio network, to map ~~an entity of~~the packet data convergence protocol layer <u>entity</u> to logical connections for payload and for at least two different ~~compress~~<u>compression</u> states;

the packet data convergence protocol layer entity is configured to separate the payload and header fields of an IP packet to be transferred;

the packet data convergence protocol layer entity is arranged to compress the header fields using ~~the~~<u>a</u> selected compression algorithm and compression context; and

the packet data convergence protocol layer entity is configured to transfer the payload and the header fields compressed on the basis of <u>the at least two</u> different <u>compression</u> states on the logical connections allocated to them.

12.   (Currently Amended) A mobile station according to claim 10, comprising a radio resources control protocol layer <u>entity for</u> ~~which controls~~<u>controlling</u> a packet data convergence protocol layer <u>entity in the mobile station</u>~~of the data link layer~~, wherein the packet data convergence protocol layer entity is configured to decompress the header fields

received on the logical connections according to ~~the~~a negotiated compression algorithm and compression context, and

the packet data convergence protocol layer entity is configured to combine the header fields and the payload.

13.   (Currently Amended) A ~~radio~~-network element ~~controller of~~ for a mobile communications system comprising a data link layer configured to transfer data to and from a plural number of mobile stations, wherein

the ~~radio network controller~~-network element is configured to allocate at least two logical connections on the data link layer for transmission of header fields compressed on the basis of different contexts, the network element being configured to allocate a logical connection to header fields of an initiation/refresh compression state and a logical connection for header fields of a first order compression state and header fields of a second order compression state; and

the network element ~~data link layer~~ is configured to transfer ~~the~~a compressed header fields ~~compressed on the basis of different contexts~~ on one of said separate logical connections, depending on a compression state of the header field.

14.   (Currently Amended) A ~~radio network controller~~-network element according to claim 13, the network element comprising ~~in which~~ a radio resources control protocol layer entity for controlling ~~controls~~ a packet data convergence protocol layer entity ~~of the data link~~ in the network element ~~layer~~, wherein the radio resources control protocol layer entity is configured to transfer to ~~the~~a radio resources control protocol layer of the mobile station an instruction for the allocation of logical connections;

the radio resources control protocol layer entity is configured to map ~~an entity of~~ the packet data convergence protocol layer entity to logical connections for payload and for at least two different compression states;

the packet data convergence protocol layer entity is configured to separate the payload and header fields of an IP packet to be transferred;

the packet data convergence protocol layer entity is arranged to compress the header fields using ~~the~~a selected compression algorithm and compression context; and

the packet data convergence protocol layer entity is configured to transfer the payload and the header fields compressed on the basis of the at least two different compression ~~different~~ states on the logical connections allocated to them.

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15.   (Currently Amended) A ~~radio network controller~~ network element according to claim 13 the network element comprising~~in which~~ a radio resources control protocol layer ~~controls~~ for controlling a packet data convergence protocol layer entity in the network element~~of the data link layer~~, wherein the packet data convergence protocol layer entity is configured to decompress the header fields received on the logical connections according to ~~the~~ a negotiated compression algorithm and compression context; and

the packet data convergence protocol layer entity is configured to combine the header fields and the payload.